





Registered Nurse Workforce Survey Report 2020

Acknowledgements

The Illinois Nursing Workforce Center (INWC) would like to express our gratitude to the individuals and organizations that have made this report possible. We would especially like to thank:

- The Governor of Illinois, JB Pritzker; the Acting Secretary of the Illinois Department of Financial and Professional Regulation (IDFPR), Mario Treto, Jr.; and the Acting Director of Professional Regulations, Cecilia Abundis, for their support and interest in the study of nursing workforce.
- The Illinois Nursing Workforce Center Advisory Board:
 - Linda D. Taylor, PhD, RN, CNE, Chairperson
 - Lynda M. Bartlett, MS, MBA, RN
 - Laura W. Bernaix, PhD, RN
 - Amanda Buechel, BSN, RN, CCRN
 - Krista L. Jones, DNP, MSN, PHNA-BC, RN, Vice-chairperson
 - Pam Bigler, DNP, RN, NEA-BC, FACHE
 - Frances LaMonica, MS, RN
 - Cynthia L. Maskey, PhD, RN, CNE
 - Marsha A. Prater, PhD, RN, NEA-BC, FACHE
 - Theresa E. Towle, DNP, FNP-BC, CNRN

Completed in 2020, under the leadership of the Illinois Nursing Workforce Center's Advisory Board of Directors, this survey was the fourth Illinois Registered Nurse (RN) workforce survey offered with individual on-line licensure renewal. The acquisition of data was accomplished through the collaboration of the following IDFPR sections: Licensing, the Division of Nursing, the Board of Nursing, the Illinois Nursing Workforce Center and the State of Illinois Department of Innovation and Technology.

Special thanks to the nurses licensed in Illinois who responded to the survey. The feedback provided will make a significant contribution to planning health services in Illinois, specifically those focused on the nursing workforce.

Contents

TOPIC	PAGE
Introduction	4
Key Findings	5
Executive Summary	7
Demographics	9
Human Capital	13
Earnings	20
Limitations	21
Discussion and Implications	22
References	27
Appendix A, Survey Questions	30
Appendix B, Employment Specialty by Age	32
Appendix C, Workforce Maps – Estimate Number of Active Nurse Licenses	34
Appendix D, Estimate Number of Illinois Nurses by County, Ratio to Population	36

Figures

FIGURE	PAGE
1: Age Cohorts	9
2: Diversity: Race, Ethnicity Overall	10
3: Diversity: Race, Ethnicity, Gender, by Age	11
4: Initial and Highest Level of Education	14
5: Primary Employment Setting	16
6: Employment Setting	17
7: Annual Salary Distribution	20
8: Comparison of Annual Salary, Job Title/Role	21

INTRODUCTION

The Illinois Nursing Workforce Center Registered Nurse (RN) Workforce Survey 2020

The primary source of data for this report was from a voluntary survey offered to individual Registered Nurses (RNs) completing on-line license renewal conducted from 3/10/20 to 9/30/20. The 2020 license renewal period was extended from May 30 to September 30, 2020, by Executive Order during the initial period of the COVID-19 pandemic. Of the 194,597 Registered Nurses in Illinois, 41,983 completed the survey, representing 22% of those who hold an RN-only license. Advanced Practice Registered Nurses (APRNs) and Advanced Practice Registered Nurses – Full Practice Authority (APRN-FPAs), who are also licensed as RNs, were not included in the survey data analysis.

About the survey: The survey included 26 questions consistent with the National Forum of State Nursing Workforce Centers recommended Supply minimum set of data to standardize information collected. A comprehensive record of questions is provided in Appendix A. Information obtained from the survey can be categorized into three areas: 1) demographic information such as age, diversity (race, ethnicity, gender), and retirement horizon; 2) human capital elements such as level of education, workplace role and employment specialty area; 3) job characteristics of work setting, annual salary, workplace violence, and other details.

Illinois Nursing Workforce Center Registered Nurse (RN) Survey 2020

Key Findings:

- Employment: 92% of nurses work full-time at one job and are actively employed in nursing.
- Employment setting: the majority of Illinois RNs, 52%, work in an acute care setting such as a hospital; 11% are employed in an ambulatory care setting. RNs positions vary in each setting.
- Diversity: there is more racial, ethnic and gender diversity of RNs under the age of 45 years in the Illinois workforce.
- Age: age cohorts for Illinois RNs in 2020 are similar to those reported in 2018. Approximately 51% are over 55 years of age.
- Education: 58% of RNs have as the highest nursing degree either a bachelors, masters, or doctoral degree.

Diversity

- > 58% of Hispanic/Latinx nurses are less than 45 years of age.
- > 45% of nurses that are male are less than 45 years of age.
- ➤ 42% of Asian nurses are less than 45 years of age.
- > 56% of nurses that identify as Multiracial are less than 45 years of age.

Age of the RN Workforce

- > 52% of the RN workforce is 55 years of age and older.
- ➤ 31% are between the ages of 55-64 years.
- > 70% of nursing faculty are 55 years of age and older.

RN Employment Settings

- ➤ 52% of RNs practice in a hospital/acute care setting especially nurses in the younger age cohorts.
 - The hospital is the most common acute-care employment setting where nurses have different roles.
- ➤ 11% of RNs practice in ambulatory care settings, including outpatient clinics, private practice, doctor offices.
- ➤ 9% of RNs practice in a nursing home/extended care/assisted living setting.
- > 4% of RNs are school nurses.

RN Position Role

- ➤ 66% of RNs provide direct patient care as staff nurses working in acute and non-acute care settings.
- > 15% Identify as a nurse manager, administrator, or patient care coordinator.
- > 3% Identify as nursing faculty.
- ➤ In Illinois the average staff nurse salary ranges from \$55,000-\$85,000; the average administrator/manager's salary ranges from \$75,000-\$185,000; the average nursing faculty salary ranges from \$65,000-\$105,000.

^{*}APRNs and APRN-FPA's who are also licensed as RNs were not included in the survey data.

RNs completing license renewal were invited to participate in this survey. The data was collected during the renewal process post payment of the license renewal fee. Data was collected from 3/10/20 to 9/30/20. The 2020 license renewal period was extended from May 30 to September 30, 2020, by Executive Order during the initial period of the COVID-19 pandemic. Of the 194,597 Registered Nurses licensed in Illinois, 41,983 completed the voluntary survey, representing 22% of those who hold an RN-only license. Advanced Practice Registered Nurses (APRNs) and Advanced Practice Registered Nurses – Full Practice Authority (APRN-FPAs), who are also licensed as RNs, were not included in the survey data analysis.

Executive Summary

General overview: Analyzing nursing workforce data through the lenses of nursing licensure, different specialties, levels of care, and geographic location may inform ways to strengthen strategic efforts for the mobilization of healthcare workers during any epidemic or pandemic (1). This report contains data on the characteristics, supply and distribution of the current Illinois RN workforce, the relative numbers of RNs in each age group, their racial, ethnic and gender diversity, education preparation, education advancement, specialty practice area and workplace role. Based on these findings, issues and concerns around the capacity, distribution and diversity of the nursing workforce are identified. Data in this report is useful in maintaining access to health care and planning for the provision of essential primary care and other health care services.

<u>Diversity:</u> Consistent with the increase in ethnic and racial diversity in Illinois, data collected indicate a slight increase in the number of nurses of color in the RN workforce in select groups of the younger cohorts. For, those identifying as Hispanic/Latinx, 58% are 44 years of age or younger, while 6% are 65 years of age or older. In the Multiracial category, 56% are 44 years of age or younger, while 8% are 65 years of age or older. The increase in diversity in younger age cohorts did not hold true for all age groups, 28% of Black/African American respondents reported being 44 years of age or younger, compared to the 20% that are 65 years or older. White/Caucasian females with initial licensure in the U.S. continue to constitute a substantial majority of all respondents, approximately 77%; this is less than the 93% reported in 2007 (2).

Aging workforce: The report presents important information about the aging of the RN workforce. In 2020, 52% of respondents are 55 years or older, which is the same as in 2018. In 2014, this age cohort was 42%, so this is a 10% increase in this older age cohort of Illinois RNs. The relatively rapid increase in RNs in older age categories has significant implications for workforce planning. Similar to 2018, approximately 27% of the respondents indicated an intent to retire within the next five years. This combination of aging workforce and retirement plans indicate the potential of an impending shortage of nurses and nursing expertise within the next five years.

<u>Education post-licensure:</u> Education post-licensure is either through obtaining additional degrees and/or through specialty certification and recertification. Responses to questions regarding registered nurses' intent to seek higher degrees revealed a low percent of respondents intend to pursue an additional degree. Respondents who are not pursuing a degree post-licensure indicated that the greatest barrier was cost, specifically cost of tuition, followed by family obligations. Eight per cent of respondents indicated they were currently enrolled in a

nursing education program, which in the entire RN population is approximately 15,568 RNs. This is separate from the continuous professional development such as specialty certification and continuing education courses. There are 182 or 183 types of nurse certification examinations.

Specialty foci: The respondents reported employment in these top five nursing specialties: acute care; family care from pediatrics through gerontology; medical; surgical, perioperative; and community-health promotion. The data also demonstrate the distribution of nurses in specialties by age cohorts, revealing significantly fewer younger nurses in specialties such as psychiatric mental-health, school health, public health, gerontology, and community health nursing. These trends stand in contrast to the Illinois report, *The Workforce Implications of New Health Care Models (2014)*, which forecasts a significant increase in ambulatory services, as well as a concomitant need for RNs to practice in community-based settings (3).

<u>Summary:</u> Collectively, the 2020 Illinois Registered Nurse (RN) workforce survey is a useful resource as health care planners project the human health care capital that will be needed in Illinois. The information will allow the Illinois Nursing Workforce Center (INWC) to address questions around the current RN supply, will it be adequate to meet the health care needs of Illinois residents? Health care workforce planners should use these data to help determine what types of RN (e.g. specialty, role) will be in greatest demand, in what locales, as well as the types of specialties and skills that will be required in future models of care.

Demographics

General Overview

Data on the characteristics and supply of RNs in the State of Illinois is essential to expanding access to care and planning for provision of essential primary and other health care services. This report contains data on the demographics of our current RN workforce, the relative numbers of RNs in each age group, their racial and ethnic diversity, educational preparation, employment specialty, employment role, annual salary, and job characteristics of work-place setting.

Figure 1 presents the distribution of Registered Nurse (RN) survey participants by selected age categories. Age is derived from unfiltered participant responses to date of birth. The years of age are listed on the vertical axis, the horizontal bar for each category represents the per cent of respondents in this age category. The substantial share of Illinois RNs in advanced age categories represents a significant context for many other observations in this report. The value of these age categories as a cross-reference for other information is enhanced by the relatively small number of non-responses (691).

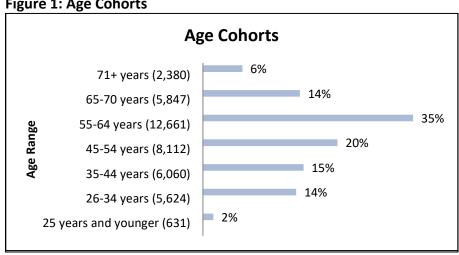


Figure 1: Age Cohorts

Number skipped: 691

The age cohorts of Illinois RNs in 2020 are similar to those reported in 2018. For example, in both 2018 and 2020, 52% of respondents were 55 years of age and over. In 2014, 42% of respondents were 55 years of age and older, which is a 10% increase over a short six-year period. The steady increase in RNs in the older age categories has implications for workforce planning.

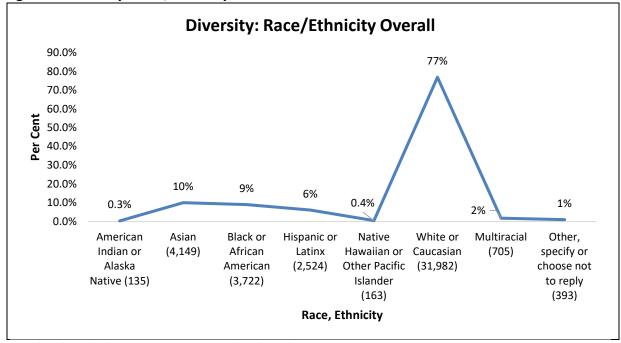


Figure 2: Diversity: Race/Ethnicity Overall

Number skipped ethnicity question: 280; number skipped race question: 427

Overall diversity of the nursing workforce in Illinois was determined by two questions asked in sequence: "Are you Hispanic or Latino;" followed by the question "Select one of the following races that apply to you". Responses are illustrated in Figure 2 (above). There were 41,576 responses, 427 individuals did not respond to the race question, 280 did not respond to the ethnicity question. These 2020 results are similar to those of the past four years of Illinois RN surveys with some slight differences. The category of Hispanic/Latinx is approximately 2% higher in 2020 than it was in 2018. The category of Asian is approximately 1% higher compared to the 2018 RN survey. The category of White/Caucasian was 77% in 2020, which is approximately 4% lower than it was in 2016.

Diversity of the Illinois RN workforce and age is explored in Figure 3 (below). The U. S. Census Bureau describes the Hispanic ethnonym as a culture regardless of race, so these data may represent duplicate counts.

Figure 3: Diversity: Race/Ethnicity/Gender by Age

	Race/Ethnicity by Age								
Age		<25 years and younger	26-34 years	35-44 years	45-54 years	55-64 years	65-70 years	71+ years	Total*
American Indian or Alaska Native		0%	15%	20%	26%	28%	7%	4%	0.3%
N		0	20	26	34	36	9	5	130
Asian		2%	22%	19%	30%	17%	9%	2%	10%
N		61	886	776	1,205	683	354	94	4,059
Black/African American		0.6%	9%	18%	23%	29%	14%	7%	9%
N		22	336	663	812	1,048	498	241	3,629
Native Hawaiian or Other Pacific Islander		0%	18%	24%	28%	24%	4%	3%	0.4%
N		0	28	39	44	38	7	4	160
White/Caucasian		2%	12%	13%	18%	33%	15%	6%	77%
N		485	3,903	4,179	5,685	10,512	4,848	1,979	31,591
Hispanic/Latinx		4%	31%	24%	19%	17%	5%	1%	6%
N		77	661	526	401	375	100	29	2,169
Multiracial		4%	27%	25%	20%	17%	6%	2%	2%
N		25	188	174	135	114	40	15	691
Female		2%	13%	14%	20%	31%	15%	6%	93%
N		566	4,999	5,464	7,459	12,018	5,573	2,281	38,358
Male		2%	22%	21%	23%	21%	9%	3%	7%
N		61	611	566	614	563	234	74	2,723
Age		<25 years and younger	26-34 years	35-44 years	45-54 years	55-64 years	65-70 years	71+ years	Total*

The U.S. Census Bureau describes the Hispanic ethnonym as a culture regardless of race, so these data may represent duplicate counts.

Number skipped ethnicity question: 280; number skipped race question: 427

^{*}This total maybe different from the Overall race/ethnicity total in Table #2. In that overall summary table, comments from "other" were added to the appropriate race, ethnicity category.

Racial and ethnic representation of the Illinois RN workforce differs depending on the age of the nurse. White/Caucasian females continue to constitute a substantial overall majority, approximately 77% of all Illinois RNs. However, there are indications of changing demographics observable across age categories. For instance, approximately 58% Hispanic/Latinx respondents are 44 years of age or younger, with 6% over 65 years of age. Of the Multiracial respondents, approximately 56% are 44 years of age or younger, with 8% over the age of 65 years. For Asian respondents, approximately 43% are 44 years or younger and 11% over the age of 65 years. 28% of Black/African American respondents are 44 years of age or younger, with 20% who are 65 years of age or older.

The gender distribution among the Illinois nursing workforce continues to be dominated by women. In the 2014, 2016 and 2018 surveys, the RN respondents were 94% female. This is slightly higher than the 91% national average (4). However, gender distribution does differ by race and ethnicity: for example, for Asian respondents, approximately 86% (3,556) are female, 14% (574) are male. For Multiracial respondents, 89% (627) are female and 11% (74) are male. For Hispanic/Latinx respondents, 90% (1,959) are female and 10% (225) are male. The gender distribution amongst nurses who are of a racial and ethnic minority is slightly different from the overall Illinois RN gender distribution.

Consistent with Illinois RN surveys in the even years from 2014-2018, the overwhelming majority of respondents received initial RN licensure in the United States. In 2020, 93% (39,170) received initial RN licensure in the United States, 5.8% (2,405) in the Philippines, 0.71% (293) in India, 0.24% (99) in Nigeria, 0.17% (69) in Canada, 0.14% (57) in Poland and 845 did not respond to the question. In summary, the number of Illinois RNs who received their initial RN license in a foreign country has remained essentially unchanged since the 2007 Illinois Center for Nursing Survey (5).

The retirement plans of respondents were assessed by a pair of questions in the survey. Responding to the question, *How much longer do you plan to practice as an RN in Illinois*, there was a small number (2,190) of non-responses and 20% indicating uncertainty with regards to retirement plans. The largest group of respondents 27% is composed of RNs within five years of exiting nursing practice. Approximately 43% of those responding to this question report anticipated retirement over the next decade. The percent anticipating retirement in the next 10 years remains essentially unchanged between 2016 and 2020. However, a comparison between the 2014 and 2020 survey data shows an increase of 7% in the percentage of respondents who plan to retire in 10 years, from 36% in 2014 to 43% in 2020. What is unknown

is the number of the respondents who have already retired but continue to maintain an active nursing license.

The second question, If you plan to retire within the next 5 years, is there a primary factor that would persuade you to continue working as a nurse, to extend your date of retirement (Select only one), was skipped by 3,552 respondents, and 50% checked that they do not plan to retire. The two categories receiving the most responses regarding extending the retirement date were: shortened/flexible work hours and economic conditions.

Human Capital

The concept of human capital encourages us to think of the workforce in terms of the productive capacity of each individual. Skills and knowledge can be general (productive in a variety of contexts) or specific (most valuable in a particular context, such as a unique industry setting or specialized occupational role). A human capital perspective is essential to our full appreciation of the role of RNs in health care, education, and workforce development in promoting economic growth and societal well-being. In this section we look at education and the area of - practice specialty as well as the role of the RN in the specialty work area.

Education

Traditional pre-licensure nursing education programs for Registered Nurses (RNs) in Illinois are the hospital diploma program, an associate degree (ADN) obtained at a community college or a private college, or a bachelor's degree (BSN) obtained at a university or college. Bachelor of Science in Nursing (BSN) Accelerated programs admit students that already have obtained a bachelor's degree in another discipline to obtain a BSN degree in an accelerated format and amount of time. Master of Nursing (MSN) Entry programs allow students that already have a bachelor's degree in another discipline to obtain an MSN degree, instead of a BSN degree, while preparing them to take the NCLEX ® RN license exam. There are five varieties of pre-licensure RN education programs available in Illinois.

Illinois graduates approximately 7,000 newly licensed RNs annually (6). There are associate degree RN (ADN) programs in 39 community colleges; traditional RN baccalaureate (BSN) degree programs in 33 colleges or universities; the 11 accelerated BSN degree programs are in the colleges and universities that also have the traditional BSN programs. Of the seven MSN entry programs, five have both an MSN entry program as well as a traditional BSN degree program. There is one hospital RN diploma program. The question, *What type of nursing degree/credential qualified you for your first U.S. nursing license*, refers to one of these five

types of initial RN pre-licensure education programs. The chart below, Figure 4, combines two questions regarding nursing education: What is your initial level of education and what is your highest level of education.

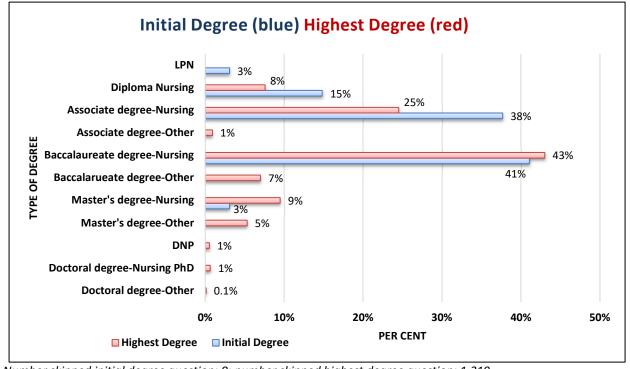


Figure 4: Initial and Highest Level of Education

Number skipped initial degree question: 0; number skipped highest degree question: 1,319

The percentage of nurses initially becoming licensed as an RN and entering the field via the Associate Degree in Nursing (ADN) route (37%), was close to those entering at the Bachelor of Science in Nursing (BSN) level 44%. The next highest category of those entering the field was comprised of nurses who initiated their career via a hospital diploma school (13%). The remaining 6% were distributed across a broad spectrum of educational categories.

The table above (Figure 4) shows both the educational degree at the time of initial license (blue lines) and the current or highest degree (red line). The type of degree that Illinois RNs acquired prior to initial licensure has remained essentially unchanged from 2014 through the present. For example, from 2014 through 2020, 37% of respondents indicated the initial degree prior to RN licensure was an associate degree in nursing (ADN). In 2014, 39% respondents indicated the initial degree was a bachelor's degree in nursing, or BSN, and in 2018 44% indicated the initial degree was a BSN.

When respondents were asked to indicate the highest degree attained (red lines), 24% of respondents indicated an associate degree (ADN); and 6%, indicated a hospital diploma, suggesting many nurses continue their academic education during their careers. Since 2014, the number of RNs whose *highest* level of education is a bachelor's degree (BSN) or higher has continued to increase, from 63% to 69%. There is an approximate 14% decrease in the number of nurses whose highest degree is an associate degree or ADN; in 2014 the decrease of nurses whose highest degree is an ADN was 10%. While a significant percent of nurses return or continue to school to obtain a master's degree, either in nursing (9%) or another field (5%), the number of nurses with an earned research doctorate (PhD) remains small (0.61%).

Respondents were asked: Are you currently enrolled in a nursing education program leading to a degree/certificate? and, 91% responded "no". When asked the barriers to continuing your education: the greatest barrier was cost, specifically cost of tuition (36%), followed by family obligations (14%). These results regarding barriers are similar to the results in surveys from 2014 through 2020, when approximately 10% of Illinois RNs indicated they were returning to school, continuing their education leading to a degree or certification.

The other area of nursing education is specialty area certification and recertification. Nurses validate their mastery of skills, knowledge and abilities through certification and meet ongoing learning and practice requirements through recertification (7). There are 182 or 183 types of nurse certification examinations. Area of certification or whether or not a nurse is certified was not asked on the survey.

Employment, Job Characteristics

The overwhelming majority of respondents, 92%, work full-time at one job and are actively employed in nursing. Of those respondents who work part-time or per diem, the majority are also actively employed in nursing. A small number of respondents, approximately 11%, work multiple jobs. Approximately half or 50% of respondents work a 31- 40 hours per week on all jobs. For those who work part-time, 21% work less than 30 hours per week, and approximately 25% work between 41-60 hours per week; very few respondents work more than 60 hours per week.

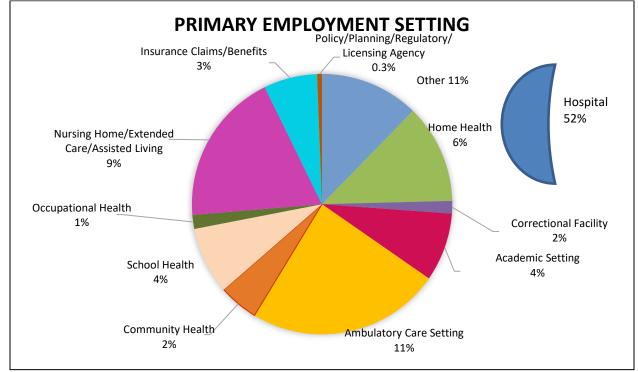


Figure 5: Primary Employment Setting

Number skipped: 9,119

Figure 5 (above) is a visual description of the various RN employment settings. The main employment setting for Illinois RNs is in a hospital/acute care setting (52%), which is a slight decrease from 54% in 2016. The remainder are employed in a myriad of settings; the most common are ambulatory care (11%), nursing home/extended care/assisted living (9%), academic (9%), community (2%), school health (4%), and home health (6%). This is only a slight decrease in the numbers of nurses working in hospital/acute care settings since 2018, but a significant decrease since 2000 when 64% RNs were employed in a hospital/acute care setting. This shift in care setting reflects an increased focus on RN roles and positions in non-acute care or ambulatory and community settings.

Figure 6 (below) is a chart that describes the different Illinois RN workplaces by providing the percentages and number of survey respondents per employment setting where Illinois RNs work. Respondents were provided the opportunity to write in a workplace descriptor in the "Other" category. If the descriptor fit with a previously listed major category, the response was moved up to that category, and the "Other" per cent was adjusted. The original "Other" response rate was 11.07%, after the redistribution, it is now 5.74%. Some of the settings that were written in the "Other" category are listed in the in Figure 6 below.

Figure 6: Employment Settings

Employment Settings		
Setting	Per Cent	Number
Hospital	52%	17,008
Ambulatory Care Settings (Office: 446, Private Practice: 112)	11%	3,689
Nursing Home/Extended Care/Assisted Living (IL Veterans Home:3, Group Home: 299)	9%	2,931
Home Health	6%	1,893
Academic Setting	4%	1,309
School Health	4%	1,283
Community Health	2%	752
Public Health	2%	510
Insurance Claims/Benefits	3%	1,021
Occupational Health	0.8%	265
Correctional Facility	0.7%	240
Policy/Planning/Regulatory/Licensing	0.3%	96
Other Includes: Call Center, Triage, Telehealth (0.62%, 205) Outpatient or Ambulatory Surgery, Urgent Care (0.14%, 44) Hospice (0.62%, 205), Dialysis (0.42%, 139), Mental Health Center, Rehabilitation, Church, Corporation, Private Duty, Work-at-home, Education, Home	6%	1,887
Setting	Per Cent	Number
Employment Settings		1

Position Title: In the employment settings approximately two thirds or sixty-six per cent (21,569) of the respondents provide direct patient care as staff nurses. The next most common position title is nurse manager or administrator (10%/3,249), followed by patient care coordinator (5%/1,535), and nursing faculty (3%/928). These responses are similar to the past RN survey reports since 2014. These position titles reflect only a few of the leadership roles of nurses

in the patient care setting. For example, a staff nurse may be in charge of an inpatient unit, or on a quality assurance committee that determines changes in care or patterns of care. Managers and others may also be involved in hospital or community based strategic planning committees. The many roles of a nurse are in addition to the position title.

Employment specialty: The specialty practice area reflects the breadth of clinical specialty knowledge required by the RN's primary role. For this question, more than one clinical specialty area could be selected by respondents. The most frequently reported specialty areas: acute care/critical care/intensive care (21%), family (16%), medical (13%), community- health promotion (11%) and surgical (9%). Below is a list of specialty areas, and the percent of nurses specializing in each area.

- Acute Specialties: Acute Care (8%), Critical Care (6%), Emergency (5%), Orthopedics (1%), Trauma (0.5%),
- Case Management, Risk Management: (2%)
- Community, Health Promotion: Community (1%), Home Health (4%), Public Health (2%), School Health (4%)
- Faculty/Education/Educator: (1%)
- Family: includes Pediatrics through Geriatrics/Gerontology: Family Health (1%), Primary Care (2%), Adult Health (3%), Pediatrics (3%), Women's Health (2%), Geriatric/Gerontology, (6%)
- Insurance/Reimbursement/Utilization Review/Workers Compensation: (2%)
- Maternal-Child Health: (4%), Neonatal (2%)
- Medical, includes Specialties: Medical (5%), Nephrology (1%), Oncology (3%), Rehabilitation (2%), Occupational Health (1%)
- Other: (12%)
- Palliative Care: (0.6%), Hospice (1%)
- Psychiatric/Mental Health/Substance Abuse: (4%)
- Surgical, Perioperative: Anesthesia (0.1%), Perioperative (3%), Surgical (5%)
- Tele-health: (3%)
- Retired: (0.2%)

The original "Other" response rate was 19%, which is a similar to the "Other" response rate in both the 2016 and 2018 RN surveys. If the specialty listed in the "Other" comments section was the same as or similar to a major category already listed, such as "Medicine" or "Telehealth", it was moved into that category and the per cent total for that category was adjusted. For some with a high response rate, such as case management, a new major category was created. The specialty areas with high response rates are listed above and have been

subtracted from the original "Other" response total. With the redistribution of individual specialties as described above, the "Other" category is now 12%.

Employment specialty by age cohorts is illustrated in Appendix #B. There are subtle but notable differences with critical care, emergency, and medical commanding greater shares within young cohorts. Specialty areas with larger shares in older cohorts include public health, community health, school nursing, surgical specialties, geriatric/gerontology, and psychiatric/mental health/substance abuse. This limited number of young nurses in these specialty care areas is particularly concerning given the high need for mental health providers and the anticipated rise in the geriatric population.

Emerging Trends: Workplace Violence

The Illinois General Assembly (IGA) in 2018 passed the Health Care Violence Prevention Act (Public Act #100-1051) to combat the violence that occurs against health care workers in nearly all care settings. To better understand workplace violence, three questions were asked. The questions were prefaced by the Emergency Nurses Association (ENA) definition of violence: an act of aggression directed toward persons at work or on duty that ranges from offensive or threatening to homicide. Workplace violence is commonly understood as any physical assault, emotional or verbal abuse, or threatening, harassing, or coercive behavior in the work setting that causes physical or emotional harm. Both the questions and the definition were used with permission from the Emergency Nurses Association (8).

Below are the three questions with summary of responses; just under 5,000 respondents skipped each question.

- 1. How often have you experienced patient/visitor/family physical or verbal abuse while at work? the range of options began with "on each shift" (3%) through "never" (23%). Weekly (11%), monthly (12%), quarterly (8%), semi-annually (6%), annually (5%), less than annually (18%), I am not currently working (10%).
- 2. Where have you attended workplace violence training: current facility (60%), other location (15%), both current facility and other location (12%), have never attended training (13%).
- 3. Does your facility have a policy in place for reporting workplace violence incidents: yes (86%), no (2%), don't know (12%).

In summary, 35% of RNs report experiencing physical or verbal abuse (based on the ENA definition) at least quarterly. A significant difference between the 2018 and the 2020 survey is that in 2018 21% of the nurses responded that they had never attended workplace violence

training. In 2020 the number that have not attended this type of training is down to 13%. The vast majority of nurses, 86%, know that the facility where they work has a policy for reporting workplace violence.

Earnings

The survey included a question about annual salary: what is your current annual salary for your primary nursing position? Seventeen intervals were provided as a range for annual earnings from the nurse's primary position; about 7% (2,983) of RNs did not respond. Figure 7 (below) shows the salary ranges. The median response range for annual salary was \$65,000 to \$75,000, with reported values throughout the full range of possibilities. The United States Department of Labor, Bureau of Labor Statistics national average (May 2020) shows an annual mean income for RNs working in Illinois to be \$73,510 (#29-1141) (9). The Illinois RN income is approximately the same as national wage estimate.

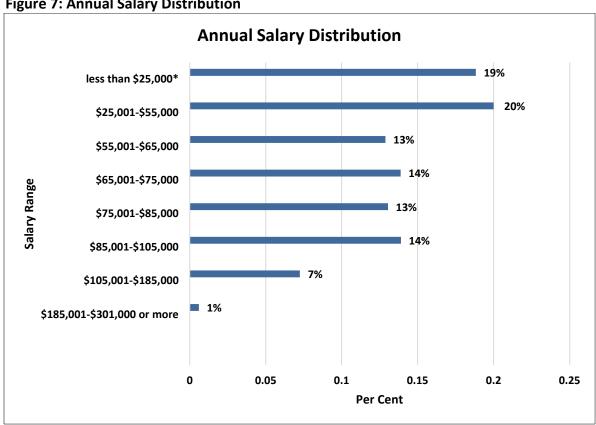


Figure 7: Annual Salary Distribution

Number skipped: 2,983; *the nurses making less than \$25,000 were working part-time.

Below (Figure 8) shows a comparison of the compensation for nurses based on the role or position title. The table includes salary and role or position title, it does not include whether the position is full-time or part-time. It also does not reflect the many varieties of leadership roles amongst the job titles. It does show, for example that the majority of RN executives' annual salary is \$105,001+; patient care coordinators annual salary is \$75,001+; nursing faculty annual salary is \$65,001+; the staff or direct care nurses annual salary is \$55,001+. The full range is in the table below.

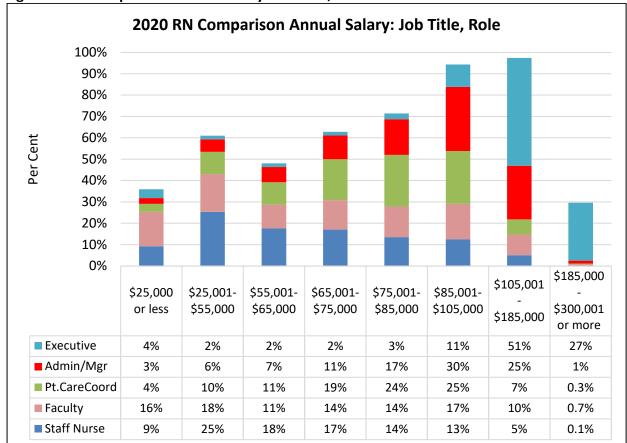


Figure 8: RN Comparison Annual Salary: Job Title, Role

Number skipped: salary question: 2,940; number skipped job title question: 9,062

Limitations

There are several limitations to this survey report. First, there was a 22% response rate to the voluntary survey offered to individual registered nurse (RNs) during the on-line license renewal process. This limits conclusions that can be drawn from the survey. The data were compared with the Illinois Department of Financial and Professional Regulation (IDFPR) database for all licensed RNs, and the voluntary responses are reflective of the Illinois RNs with

respect to age. Therefore, the confidence is that the results are consistent with Illinois licensed RNs. The IDFPR license database collects limited information during the license renewal process, so it is difficult to compare other categories of survey data to the larger Illinois population of RNs.

Discussion and Implications

The COVID-19 pandemic was not in sight when the World Health Organization (WHO) declared 2020 as the Year of the Nurse and Midwife. The initial plan was to celebrate the 200th birthday of nursing pioneer Florence Nightingale. The focus on nursing did celebrate the work of nurses and midwives, but also highlighted the challenging conditions they often faced. The pandemic has highlighted gaps in healthcare systems, and the health workforce has been disproportionately exposed to the virus. Throughout this past year, nurses have shown their willingness and flexibility in adapting to new ways of working. Reports from our National Nurses Associations (NNAs) indicate that the work of nurses in many healthcare settings continues to be emotionally and physically draining. (10).

The effects of the COVID-19 pandemic on the nursing workforce will be felt immediately and for an unknown amount of time in the future. Whether the nurse works in an acute-care inpatient hospital setting or, long-term care setting, the nurse provides 24-hour patient care. Nurses working in settings such as out-patient clinics, non-acute community facilities are also front-line workers; nurses in these settings worked to provide prevention, testing, contact tracing, vaccination information and vaccine distribution in urban and rural communities. Having data about the nursing workforce pipeline, such as age, racial, ethnic, rural, or urban representation and educational preparation are essential components in determining if we have necessary resources to care for Illinois residents.

The survey data provides information about the diversity of the RN workforce. While the overall per cent of racial, ethnic and gender diversity of the Illinois nursing workforce is higher than national average, it is not as reflective of Illinois residents. Students beginning in the Illinois dual enrollment program is an opportunity for students to begin the courses required for a healthcare career. An employer-academic partnership is another opportunity for nurses to continue education post-licensure to become nursing faculty or advanced practice nurse. Vigilance to this issue is necessary, particularly how the profession might increase diversity by optimizing entrée to nursing education programs, support during program completion as well as a plan for smooth academic progression.

Illinois continues to have a robust RN workforce with practitioners across healthcare settings. However, the survey results raise several concerns about sustaining this workforce. The registered nurse (RN) workforce is an aging group, with 52% of respondents 55 years of age or older, which is an approximately 10% increase in this age cohort of RNs since 2014. In addition, approximately one fourth of respondents indicated an intent to retire within the next five years. Note that since a significant number did not answer this question, it is unclear how many of these non-responders are already retired. Regarding new graduates, the number of graduates from pre-licensure RN programs has held steady in the last 5 years, approximately 7,000 per year (retrieved from the Board of Nursing annual report (11).

With the aging population in the United States, there is an increased demand for healthcare because of our aging population, these elderly individuals have more chronic illnesses than the younger population. Since January 1, 2011 Pew Research has indicated that a total of 10,000 men and the women, the baby boomers, have been retiring daily and will continue to retire daily for 19 years (12). Given these anticipated retirements in the general population, in concert with the number of nurses retiring, it raises concerns that the rate of nurses retiring will outpace the number of new nurses entering the workforce.

Another concern of the integrity of the RN pipeline is having adequate faculty to teach in Illinois nursing education programs. There are eighty-six pre-licensure RN programs in Illinois (hospital: 1, associate degree: 44, baccalaureate degree: 34, master's entry level program: 7)(13). In Illinois, RN pre-licensure nursing education programs require that faculty teaching RN students have at least a master's degree with a major in nursing. A doctoral degree is often required to teach graduate nursing education, both Advanced Practice Registered Nurses (APRNs) and other practice specialties. Ninety-one percent of RN respondents indicated that they do not plan on continuing their education which could result in a shortage of masters and doctorly prepared faulty. Having enough nursing faculty to maintain the nursing education pipeline is essential to the supply of nurses required to maintain and improve the health status of Illinois residents.

The Bachelor of Science in nursing degree is the beginning catalyst to career growth, is a requirement prior to obtaining the graduate degree required for nursing faculty. For example, a graduate degree in nursing is required by the Illinois Board of Nursing (BON) for all Illinois RN pre-licensure education faculty. A second example, the majority of states require an advanced practice registered nurse (APRN) to have at least a master's degree in nursing prior to licensure, and many states are moving to requiring the Doctor of Nursing practice (DNP) degree as a minimum credential for APRN license. The RN must have a bachelor's degree, prior to obtaining a graduate degree prior to obtaining an APRN license.

In Illinois, access to RN post-licensure education is offered throughout the state. The vast majority of the baccalaureate completion (BSNc) programs are offered online. There are thirty two baccalaureate completion programs at 4-year universities available to RNs with an associate degree in nursing from a 2-year community college (14). There are thirty-two graduate nursing education programs offering graduate degrees (MS, MSN, DNP, PhD) in various specialty areas (15). Most of the didactic portion of these programs are also offered remote or on-line. The additional degrees earned after pre-licensure completion are also required for many leadership roles in various healthcare settings.

The actual supply and demand for nurses in Illinois necessitates additional consideration. Nationally there has been considerable debate around nursing supply and demand. The recent RN workforce report of the U.S. Health Resources and Services Administration (HRSA) estimates a surplus of RNs by 2020 in particular states (16).

The HRSA model is described as a micro-simulation model that uses data on individuals to develop forecasts. This model assumes that supply and demand for Illinois RNs was balanced in 2012, graduations will remain stable at the 2012 rate and employment patterns will not change notably. This model also acknowledges that state data based on licensure data holds more accurate predictions. For Illinois, in 2011 there was a shortage of RNs (17) and the 2014 through 2020 RN reports indicate significant retirements. Thus, in Illinois there is reason to be concerned about the future supply of RNs.

A discussion on RN demand/capacity must also consider the nursing competencies that will be demanded in new models of care, such as tele-health care visits, team-based care as well as community based and health care at home. Another dynamic impacting RN roles is the shift in health care from acute to non-acute care settings with the increased emphasis on health promotion and disease prevention (18). According to the United States Bureau of Labor Statistics (BLS), approximately 1.1 million jobs within the homecare field will be added through 2029. In fact, the BLS reports that those working in home health positions will see a 34% growth through 2029, compared to the 14% growth rate that all jobs on average are expected to have (19).

The Illinois survey results indicate some shifting away from employment in acute care settings. In 2000, 64% of Illinois RNs worked in acute care setting, this number has decreased to 52% in 2020. Currently there are approximately 16% respondents with family health (pediatrics-through-geriatrics/gerontology) as a specialty area, and 11% respondents in the

community - health promotion settings. The data indicate that nurses in the younger age cohorts continue to choose to work in acute care settings. Public health funding in Illinois has decreased by 16% since 2010, and the workforce has decreased by 20%. We have seen during this past year of the COVID-19 pandemic that there remains a need for more nurses in public health and community settings (20). One of the *Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity* recommendations is "Practice settings that were historically undercompensated, such as public health and school nursing, are reimbursed for nursing services in a manner comparable to other settings" (21). There are concerns about the nursing workforce that will be needed to meet health care demands created by service delivery changes, population shifts and health care transformation.

One in four Americans experience a behavioral health illness each year, and the majority of those individuals also suffer from a comorbid physical health condition (22). Given the increased demand for behavioral health services it is concerning that a limited number of Illinois nurses are choosing psychiatric- mental health nursing. Nurses often have untapped potential to help people live their healthiest lives because their education and experience are grounded in caring for the whole person and whole family in a community context (23). Nurses, particularly RNs, need environments that facilitate their ability to fully leverage their skills and expertise across all practice settings (24).

Given these issues and concerns there are policy implications in five areas:

- 1. To assure an adequate RN pipeline, there is a need for more nursing faculty in both pre-licensure nursing education and post-licensure education. To rapidly increase both the number of nurses with expertise in health equity and the number of nurses in specialties with significant shortages, including public and community health, behavioral health, primary care, long-term care, geriatrics, school health an maternal health, consider expanding student loan forgiveness programs that requires both obtaining degrees with expertise in these areas and working in those areas post-graduation.
- 2. During the COVID-19 pandemic, and with the changing focus of where individuals receive health care and health promotion, we have seen that there is a need for improved competencies in public and community health, both in the education setting, and in the employment settings. There is a need to include a focus on social determinants of health, for improving the health of Illinois communities.
- 3. Behavioral health demands are great particularly given the move to integrated care and providing behavioral health care in a variety of settings. Programs are needed to incentivize

RNs to seek careers in psychiatric mental health (PMH) as well as retraining opportunities for the existing acute care psychiatric mental health, behavioral health RN workforce.

- 4. Support diversity, equity, and inclusion across the nursing workforce, and identify and eliminate policies and systems that perpetuate structural racism, cultural racism, and discrimination in the nursing profession. Increasing the racial and ethnic diversity of the health care workforce is essential for the adequate provision of culturally competent care. Direct funds to nurses and nursing schools to sustain and increase the gender, geographic, racial, and ethnic diversity of the nurse workforce (25).
- 5. Given the conflicting views on the need for RNs in Illinois in the next decade, and the state licensure data indicating the retirements of a large segment of the workforce, there is a need to study demand in Illinois and build supply demand models considering all areas of the state, all RN specialties in all work settings.

This report is a starting point for focusing on the RN workforce in Illinois, and the gaps in the care providers that *exist* and need to be filled to meet the needs of Illinois residents. Moving forward, policy decisions regarding nursing education and employment patterns should be based on the data obtained through the biennial RN workforce surveys. Comparisons from subsequent surveys should be analyzed for shifting trends and to evaluate progress toward meeting workforce requirements for addressing the current and future healthcare needs of Illinois.

References

- United States Department of Health and Human Services, Health Resources and Services
 Administration (HRSA), Bureau of Health Workforce, National Center for Health Workforce
 Analysis (2020). Characteristics of the U.S. Nursing Workforce with Patient Care
 Responsibilities: Resources for Epidemic and Pandemic Response. 2018 National Sample
 Survey of Registered Nurses. https://bhw.hrsa.gov/sites/default/files/bureau-health workforce/data-research/nssrn-pandemic-response-report.pdf
- 2. Illinois Nursing Workforce Center, *The 2007 Illinois Nursing Workforce Survey Report, October 2007.* Retrieved from: http://nursing.illinois.gov/ResearchData.asp
- 3. Healthcare Task Force Report to the Illinois Workforce Investment Board (2014). *The Workforce Implications of New Healthcare Models*. Retrieved from: https://www.illinoisworknet.com/DownloadPrint/HCTF%20Final%20Report.pdf
- 4. National Council State Boards of Nursing and the National Forum of State Nursing Workforce Centers (2017) *National Nursing Workforce Study*. Retrieved from: https://www.ncsbn.org/workforce.htm
- 5. Illinois Nursing Workforce Center, *The 2007 Illinois Nursing Workforce Survey Report, October 2007.* Retrieved from http://nursing.illinois.gov/ResearchData.asp
- 6. Illinois Nursing Workforce Center, nursing education program pre-licensure admission, graduation data, 2020. Retrieved from: http://nursing.illinois.gov/PreLeducation.asp
- 7. American Association of Critical-Care Nurses, Certification. Retrieved from: www.aacn.org
- 8. J. Gacki-Smith, et al., *Violence Against Nurses Working in U.S. Emergency Departments, J. Nursing Admin.* (Jul./Aug. 2009, 340-39).
- 9. United States Department of Labor, Bureau of Labor Statistics, *Occupational Employment and Wages, May 2020*. Retrieved from: https://www.bls.gov/oes/current/oes291141.htm
- International Council of Nurses, (2021). Policy Brief, The Global Nursing Shortage and Nursing Retention. Retrieved from: https://www.icn.ch/sites/default/files/inlinefiles/ICN%20Policy%20Brief_Nurse%20Shortage%20and%20Retention.pdf

- 11. Illinois Department of Financial and Professional Regulation, Division of Professional Regulation, National Council Licensure Examination Summary Data (2020) Retrieved from: http://nursing.illinois.gov/PDF/IIApNursingEdProgPassRates.PDF
- 12. PEW Research Center, (2010), Baby Boomers Retire. Retrieved from: http://www.pewresearch.org/fact-tank/2010/12/29/baby-boomers-retire/
- 13. Illinois Department of Financial and Professional Regulation, Illinois Nursing Workforce Center, Education Opportunities, Baccalaureate Completion (2021). Retrieved from: http://nursing.illinois.gov/BaccCompeducation.asp
- 13a: Retrieved from Illinois Department of Financial and Professional Regulation, Illinois Nursing Workforce Center, Education Opportunities, Pre-licensure Nursing Education http://nursing.illinois.gov/PreLeducation.asp
- 14. Illinois Department of Financial and Professional Regulation, Illinois Nursing Workforce Center, Education Opportunities, Graduate Education (2021). Retrieved from: http://nursing.illinois.gov/Gradeducation.asp
- 15. U. S. Department of Health and Human Services, Health Resources and Services Administration (201) Supply and Demand Projections of the Nursing Workforce:2014-2030. Retrieved from: https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/NCHWA _HRSA_Nursing_Report.pdf
- Illinois Center for Nursing, 2011 Nursing Workforce Supply-Demand Analysis for Illinois Nurses. Retrieved from: http://nursing.illinois.gov/PDF/ 2011%20RN%20
 Statewide%20Sup-Dem%20Analysis%20FINAL%20(2).pdf
- 17. Ashley, C., Halcomb, E., & Brown, A. (2016). *Transitioning from Acute to Primary Health Care Nursing: An Integrative Review of the Literature*. Journal of Clinical Nursing, 25(15-16), 2114-2125).
- 18. United States Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook*. Retrieved from: https://www.bls.gov/ooh

- 19. Trust for America's Health Foundation. (2020). *The Impact of Chronic Underfunding on Americas Public Health System*. Retrieved from: https://www.tfah.org/report-details/publichealthfunding2020/
- 20. American Hospital Association (2019). *Treating the Whole Person*. Retrieved from: https://www.aha.org/system/files/media/file/2019/06/Market_Insights-Behavioral_Health_Report.pdf
- 21. National Academies of Sciences, Engineering, Medicine: *The Future of Nursing 2020-2030*: Charting a Path to Achieve Health Equity. https://nam.edu/publications/the-future-of-nursing-2020-2030
- 22. National Academies of Sciences, Engineering, Medicine: *The Future of Nursing 2020-2030*: Charting a Path to Achieve Health Equity. https://nam.edu/publications/the-future-of-nursing-2020-2030
- 23. National Academies of Sciences, Engineering, Medicine: *The Future of Nursing 2020-2030*: Charting a Path to Achieve Health Equity. https://nam.edu/publications/the-future-of-nursing-2020-2030
- 24. National Academies of Sciences, Engineering, Medicine: *The Future of Nursing 2020-2030*: Charting a Path to Achieve Health Equity. https://nam.edu/publications/the-future-of-nursing-2020-2030
- 25. National Academies of Sciences, Engineering, Medicine: *The Future of Nursing 2020-2030*: Charting a Path to Achieve Health Equity. https://nam.edu/publications/the-future-of-nursing-2020-2030

Appendix A

Survey Questions

Question 1: What is Your Gender?

*Question 2: Are you currently licensed as an APRN (CRNA, CNM, CNP, CNS)? If yes, please cease participation, a different survey for those licensed as APRNs is available post-APRN license renewal payment of fees.

Question 3: Are you Hispanic or Latino? (Yes or No)

Question 4: Select one of the following races that apply to you:

Question 5: What year were you born? (Place a number in a box)

Question 6: In what country were you initially licensed as RN or LPN?

Question 7: What type of nursing degree/credential qualified you for your first U. S. nursing license?

Question 8: What is your highest level of education?

Question 9: Are you currently enrolled in a nursing education program leading to a degree/certificate?

Question 10: What is the greatest barrier to continuing your education? (Select only one)

Question 11: What year did you obtain your initial U.S. Licensure? (Place a number in a box)

Question 12: What is the status of the Illinois license currently held?

Question 13: How much longer do you plan to practice as an RN in Illinois?

Question 14: If you plan to retire within the next 5 years, is there a primary factor that would persuade you to continue working as a nurse, extend your date of retirement? (Select only ONE).

Question 15: What is your employment status? (Mark ALL that apply)

Question 16: If you are not currently working as a nurse, what are the reasons(s)? (Check all that apply).

Question 17: Please estimate our 2019 pre-tax annual earnings from your primary nursing position. Include overtime, on-call earnings, and bonuses.

Question 18: In how many positions are you currently employed as a nurse?

Question 19: How many hours per week do you work during a typical week in your primary nursing position?

Question 20: Please identify the position title that most closely corresponds to your primary nursing position.

Question 21: Please identify the employment specialty that most closely corresponds to your primary nursing position.

Question 22: Please indicate state and zip code of your primary employer.

Question 23: Please identify the type of setting that most closely corresponds to your primary nursing position.

Question 24: How often have you experienced patient/visitor/family physical or verbal abuse while at work?

Question 25: Where have you attended workplace violence training?

Question 26: Does your hospital/facility have a policy in place for reporting workplace violence incidents?

(*) An asterisk prior to a question indicates that the question is mandatory and must be answered in order for the respondent to continue.

Appendix B

Employment Specialty by Age

EMPLOYMENT	AGE RANGE IN YEARS								
SPECIALTY					I				
EMPLOYMENT SPECIALTY		25 Years and Less	26-34 Years	35-44 Years	45-54 Years	55-64 Years	65-70 Years	71+ Years	Total
ACUTE									
SPECIALITIES									
Acute Care	%	2%	18%	19%	22%	29%	8%	1%	10%
	N	63	492	519	594	792	230	39	2,729
Critical Care	<u>%</u>	4%	30%	18%	21%	21%	6%	1%	7%
	N	75	577	354	412	403	119	15	1,955
Emergency	<u>%</u>	2%	25%	23%	22%	20%	7%	1%	6%
	N	35	368	329	316	286	103	19	1,456
Trauma	<u>%</u>	3%	17%	16%	24%	32%	6%	3%	1%
	N	4	20	19	28	38	7	3	119
Neonatal	<u>%</u>	3%	21%	17%	21%	28%	8%	1%	2%
	N	19	128	106	131	173	50	5	612
COMMUNITY, HEALTH PROMOTION									
Community	<u>%</u>	0.2%	6%	14%	23%	34%	16%	7%	2%
	N	1	28	63	106	152	70	33	453
Home Health	<u>%</u>	0.4%	7%	13%	23%	35%	16%	7%	5%
	N	5	92	178	317	498	228	93	1,41
Public Health	<u>%</u>	1%	8%	13%	19%	40%	16%	4%	2%
	N	5	36	61	93	191	79	18	483
School Health	<u>%</u>	0.3%	6%	13%	24%	38%	13%	6%	5%
	N	4	72	155	296	463	165	68	1,223
FAMILY									
Family Health	<u>%</u>	1%	13%	16%	22%	34%	11%	5%	1%
,	N	2	47	56	76	121	40	17	359
Primary Care	<u>%</u>	0.2%	13%	18%	20%	37%	9%	3%	2%
,	N	1	66	88	99	185	44	14	497
Geriatric/	<u>%</u>	1%	10%	16%	24%	33%	11%	5%	7%
Gerontology	N	17	202	307	467	631	212	103	1,939
Adult Health	<u>%</u>	2%	14%	16%	18%	30%	14%	6%	3%
	N	16	121	140	152	261	124	51	865
Pediatric	<u>%</u>	4%	22%	16%	18%	28%	10%	2%	4%
	N	40	237	171	196	295	102	25	1,066
Women's	<u>%</u>	2%	20%	19%	23%	25%	8%	3%	2%
Health	N	10	93	89	109	119	39	16	475
Maternal-Child	<u>%</u>	3%	18%	15%	21%	32%	10%	2%	5%
Health	N	32	225	194	261	393	129	27	1,261

MEDICAL,		25 Years	26-34	35-44	45-54	55-64	65-70	71+		Total
INCLUDES		and Less	Years	Years	Years	Years	Years	Years		
SPECIALTIES										
Medical	<u>%</u>	5%	25%	18%	19%	23%	7%	1%		6%
	N	88	415	298	316	384	116	23		1,640
Nephrology	<u>%</u>	1%	11%	19%	27%	32%	8%	3%		2%
	N	3	50	86	123	145	37	14		458
Oncology	<u>%</u>	2%	19%	17%	24%	29%	8%	1%		4%
	N	20	179	158	222	267	70	10		926
Rehabilitation	<u>%</u>	2%	17%	18%	23%	30%	9%	1%		3%
	N	12	119	126	160	213	65	9		704
Occupational	<u>%</u>	0%	3%	10%	19%	46%	17%	7%		1%
Health	N	0	9	30	58	144	52	23		316
Palliative Care	<u>%</u>	0%	11%	17%	24%	33%	10%	5%		1%
	N	0	22	35	49	69	21	11		207
Psychiatric/	<u>%</u>	1%	13%	16%	22%	30%	14%	6%		4%
Mental Health/	N	13	145	182	249	342	159	68		1,158
Substance Abuse										
SURGICAL, PERIOPERATIVE										
Anesthesia	<u>%</u>	0%	14%	14%	16%	41%	8%	8%		0.1%
	N	0	5	5	6	15	3	3		37
Perioperative	<u>%</u>	1%	12%	14%	23%	40%	11%	1%		4%
	N	5	119	138	230	406	115	10		1,023
Surgical	<u>%</u>	2%	17%	16%	20%	33%	10%	2%		7%
	N	35	289	283	357	577	173	35		1,751
Tele-health	<u>%</u>	1%	9%	17%	22%	37%	11%	3%		3%
	N	12	85	152	204	333	100	23		909
Employment		25 Years	26-34	35-44	45-54	55-64	65-70	71+		Total
Specialty		and Less	Years	Years	Years	Years	Years	Years		
Employment	Employment Specialty by Age AGE RANGE IN YEARS									

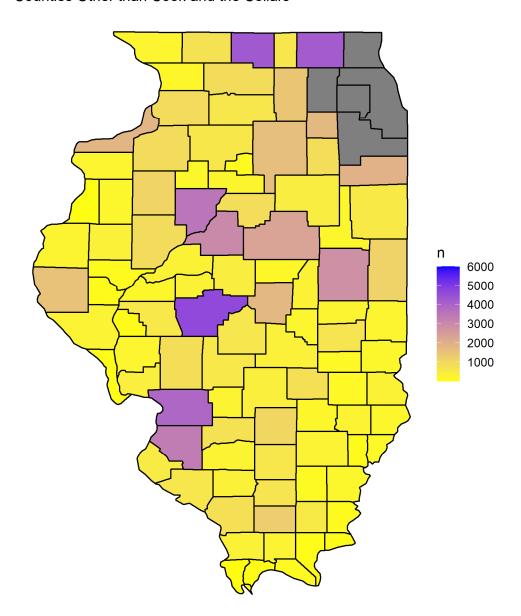
Number skipped: age question: 691; Specialty question:9,103.

Appendix C

WORKFORCE MAPS- March 2020 – Estimated Number of Active Nurse Licenses

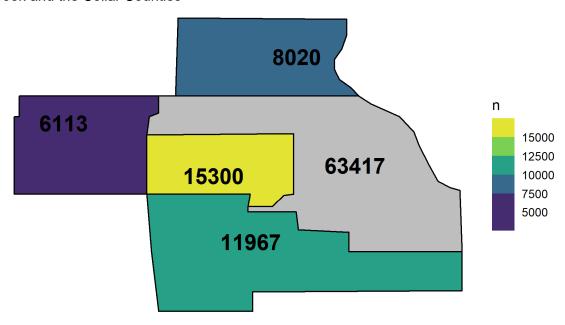
Est. Illinois Active Nurse Licenses

Counties Other than Cook and the Collars



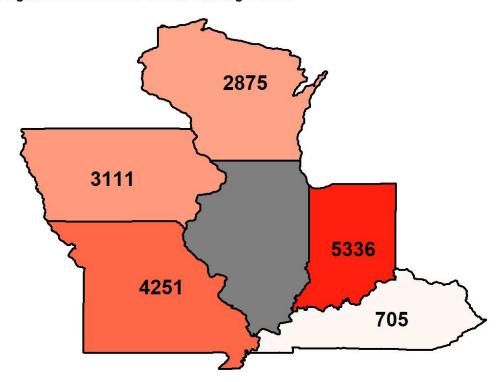
Est. Illinois Active Nurse Licenses

Cook and the Collar Counties



Active Illinois Nurse Licenses

Registered Addresses in Surrounding States



Appendix D

DATA from March 2020

Illinois Nurses by County and Ratio to Population – Estimates Only

County	Est nurses	Est county pop 2019	ratio
Adams	1555	65435	2.3764%
Alexander	47	5761	0.8158%
Bond	283	16426	1.7229%
Boone	619	53544	1.1561%
Brown	101	6578	1.5354%
Bureau	598	32628	1.8328%
Calhoun	82	4739	1.7303%
Carroll	196	14305	1.3702%
Cass	213	12147	1.7535%
Champaign	2851	209689	1.3596%
Christian	636	32304	1.9688%
Clark	221	15441	1.4313%
Clay	216	13184	1.6383%
Clinton	759	37562	2.0207%
Coles	689	50621	1.3611%
Cook	63417	5150233	1.2313%
Crawford	330	18667	1.7678%
Cumberland	170	10766	1.5790%
De Kalb	1451	104897	1.3833%
De Witt	202	15638	1.2917%
Douglas	273	19465	1.4025%
Du Page	15300	922921	1.6578%
Edgar	248	17161	1.4451%
Edwards	104	6395	1.6263%
Effingham	785	34008	2.3083%
Fayette	404	21336	1.8935%
Ford	231	12961	1.7823%
Franklin	687	38469	1.7859%
Fulton	886	34340	2.5801%
Gallatin	117	4828	2.4234%
Greene	256	12969	1.9739%
Grundy	858	51054	1.6806%

County	Est nurses	Est County	Ratio
Hamilton	145	Pop 2019 8116	1.7866%
Hancock	276	17708	1.5586%
Hardin			
	100	3821	2.6171%
Henderson	64	6646	0.9630%
Henry	892	48913	1.8236%
Iroquois	549	27114	2.0248%
Jackson	778	56750	1.3709%
Jasper	175	9610	1.8210%
Jefferson	625	37684	1.6585%
Jersey	432	21773	1.9841%
Jo Daviess	258	21235	1.2150%
Johnson	306	12417	2.4644%
Kane	6113	532403	1.1482%
Kankakee	1959	109862	1.7831%
Kendall	1783	128990	1.3823%
Knox	1090	49699	2.1932%
Lake	8020	696535	1.1514%
La Salle	1666	108669	1.5331%
Lawrence	223	15678	1.4224%
Lee	621	34096	1.8213%
Livingston	465	35648	1.3044%
Logan	455	28618	1.5899%
McDonough	350	29682	1.1792%
McHenry	4216	307774	1.3698%
Mclean	2338	171517	1.3631%
Macon	1810	104009	1.7402%
Macoupin	832	44926	1.8519%
Madison	3904	262966	1.4846%
Marion	1006	37205	2.7039%
Marshall	243	11438	2.1245%
Mason	320	13359	2.3954%
Massac	136	13772	0.9875%
Menard	321	12196	2.6320%
Mercer	262	15437	1.6972%
Monroe	512	34637	1.4782%
Montgomery	591	28414	2.0800%
Morgan	588	33658	1.7470%
Moultrie	238	14501	1.6413%

County	Est nurses	Est County Pop 2019	Ratio
Ogle	881	50643	1.7396%
Peoria	3514	179179	1.9612%
Perry	345	20916	1.6495%
Piatt	321	16344	1.9640%
Pike	295	15561	1.8958%
Pope	80	4177	1.9153%
Pulaski	76	5335	1.4246%
Putnam	120	5739	2.0910%
Randolph	622	31782	1.9571%
Richland	283	15513	1.8243%
Rock Island	1885	141879	1.3286%
St Clair	3335	259686	1.2842%
Saline	529	23491	2.2519%
Sangamon	4656	194672	2.3917%
Schuyler	117	6768	1.7287%
Scott	97	4951	1.9592%
Shelby	366	21634	1.6918%
Stark	214	5342	4.0060%
Stephenson	741	44498	1.6652%
Tazewell	3004	131803	2.2792%
Union	334	16653	2.0056%
Vermilion	1156	75758	1.5259%
Wabash	185	11520	1.6059%
Warren	225	16844	1.3358%
Washington	285	13887	2.0523%
Wayne	305	16215	1.8810%
White	231	13537	1.7064%
Whiteside	893	55175	1.6185%
Will	11967	690743	1.7325%
Williamson	1278	66597	1.9190%
Winnebago	4264	282572	1.5090%
Woodford	874	38459	2.2726%
	182925	12671821	1.7564%